

AMENDMENTS TO THE CLAIMS

Claims 1-8 (Cancelled)

9. (Previously presented): A biodegradable hydrogel comprising a network of polymer chains, wherein said network contains polymer backbones which are interconnected to one another through spacers formed by crosslinked units, wherein the spacers contain, between said polymer backbone and the crosslinked unit, one or more bonds which are hydrolysable under physiological conditions,

wherein at least one of the bonds which are hydrolysable under physiological conditions comprises a carbonate ester bond;

wherein said crosslinked unit is comprised of a polymer of (poly)glycolic acid and/or (poly)lactic acid, in combination with acrylate, methacrylate and/or hydroxyalkyl methacrylate groups; and

wherein said polymer backbones are selected from the group consisting of dextran, derivitized dextran, starch, starch derivatives, hydroxyethyl cellulose, hydroxypropyl cellulose, polyvinylpyrrolidone, polyvinylalcohol, polyacrylate, polymethacrylate, and polyethylene glycol.

10. (Cancelled)

11. (Previously presented): The hydrogel of claim 9, wherein said carbonate ester bond is derived from carbonyl di-imidazole.

12. (Cancelled)

13. (Previously presented): The hydrogel of claim 9, wherein said polymer backbones are derived from a water-soluble polymer.

14. (Previously presented): The hydrogel of claim 11, wherein said polymer backbones are derived from a water-soluble polymer.

15. (Cancelled)

16. (Previously presented): The hydrogel of claim 13, wherein said water-soluble polymer is dextran or a derivatised dextran.

17. (Previously presented): The hydrogel of claim 14, wherein said water-soluble polymer is dextran or a derivatised dextran.

18. (Cancelled)

19. (Previously presented): The hydrogel of claim 9, further comprising a drug.

20. (Previously presented): The hydrogel of claim 19, wherein the drug is a proteinaceous material.

21. (Previously presented): A crosslinkable polymer capable of forming a hydrogel, comprising a hydrophilic polymeric backbone and at least one spacer, the spacer comprising one or more bonds which are hydrolysable under physiological conditions and at least one crosslinkable group,

wherein at least one of the bonds which are hydrolysable under physiological conditions comprises a carbonate ester bond;

wherein said crosslinkable group is comprised of a polymer of (poly)glycolic acid and/or (poly)lactic acid, in combination with acrylate, methacrylate and/or hydroxyalkyl methacrylate groups; and

wherein said polymer backbone is selected from the group consisting of dextran, derivitized dextran, starch, starch derivatives, hydroxyethyl cellulose, hydroxypropyl cellulose, polyvinylpyrrolidone, polyvinylalcohol, polyacrylate, polymethacrylate, and polyethylene glycol.

22. (Cancelled)

23. (Previously presented): The crosslinkable polymer of claim 21, wherein said carbonate ester bond is derived from carbonyl-di-imidazole.

24. (Previously presented): The crosslinkable polymer of claim 21, wherein said polymeric backbone is derived from dextran or derivatised dextran.

Claims 25-26 (Cancelled)

27. (Previously presented): A crosslinked polymer capable of forming a hydrogel, obtained by crosslinking the crosslinkable polymer of claim 21.

28. (Previously presented): A crosslinked polymer capable of forming a hydrogel, obtained by crosslinking the crosslinkable polymer of claim 23.

29. (Previously presented): A crosslinked polymer capable of forming a hydrogel, obtained by crosslinking the crosslinkable polymer of claim 24.

30. (Cancelled)

31. (Previously presented): A method for preparing a hydrogel, which method comprises crosslinking the crosslinkable polymers as defined in claim 21 in an aqueous medium.

32. (Previously presented): A method for preparing a hydrogel, which method comprises crosslinking at least two crosslinkable polymers as defined in claim 21.

33. (Previously presented): A method for preparing a hydrogel, which method comprises crosslinking at least two crosslinkable polymers as defined in claim 23.

34. (Previously presented): A method for preparing a hydrogel, which method comprises crosslinking at least two crosslinkable polymers as defined in claim 24.

35. (Cancelled)

36. (Previously presented): The method of claim 31, wherein a drug is present during the crosslinking step.

37. (Previously presented): The method of claim 36, wherein the drug is a proteinaceous material.

38. (Previously presented): The method of claim 32, wherein a drug is present during the crosslinking step.

39. (Previously presented): The method of claim 38, wherein the drug is a proteinaceous material.